

Appl. No. 09/628,629
Amendment under 37 CFR § 1.136 dated October 21, 2004
Reply to Office Action of April 21, 2004

Remarks

Claims 1 - 49 remain in the application.

Entrance of the present amendment in the application and reconsideration of the application in view of the amendments made in the claims are respectfully solicited.

1. Applicant's undersigned attorney wishes to acknowledge the courtesies extended by Examiner Bhatnagar and Supervisory Examiner Ahmed in the telephone interview held on October 19, 2004. No agreements were reached during the interview.

2. Claims 1, 7, 20, 26, 35 and 41 have been amended to even more particularly point out and distinctly claim the subject matter of applicant's invention.

The examiner has stated that the features upon which applicant has relied to distinguish from the prior art references ". . . are not recited in the rejected claim(s)." These features have now been expressly recited in the amended claims.

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The claims now recite that the method, filter and apparatus, respectively, selectively attenuate corruption in a digital input signal. Also, method claims 1 and 7 recite the step of performing non-linear median filtering, and filter claims 20 and 26 and apparatus claims 35 and 41 recite a non-linear median filter.

The amendatory matter is fully supported by the disclosure of the application and does not represent any objectionable new matter. The specification describes the aliasing phenomenon (see, for example, the discussion at page 4, line 10 to page 6, line 10) and makes it clear that applicant's invention is directed to the selective attenuation of corruption in a digital input signal.

It is well known in the art that median filters are non-linear filters. Accordingly, the claims now recite this fact expressly.

3. The art rejections which were made in the previous Office Action have been repeated in the present Office Action. These are:

A. Claims 1, 2, 11, 12, 20, 21, 35 and 36 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,528,301 ("Hau et al.").

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B. Claims 3, 22 and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hau et al. in view of U.S. Patent 6,519,288 ("Vetro et al.").

C. Claims 4, 23 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hau et al. as modified by Vetro et al. and further in view of U.S. Patent 5,831,677 ("Streater et al.").

D. Claims 5, 6, 24, 25, 39 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hau et al. in view of U.S. Patent 5,844,617 ("Faroudja et al.").

E. Claims 7 - 10, 26 - 29 and 41 - 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hau et al. in view of Vetro et al. and Faroudja et al.

F. Claims 13 - 19, 30 - 34 and 45 - 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,841,480 ("Rhodes") and Hau et al.

The subject matter recited in claims 1 - 49 is neither anticipated by, nor rendered obvious in view of, the references relied upon to support the rejections. As stated previously, applicant's claimed method and apparatus are directed to the selective attenuation of corruption in a digital signal and, further, that the method and apparatus utilize a non-linear median filter.

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The amended claims now recite explicitly the features which distinguish the claimed subject matter from the prior art references.

Applicant continues to rely on the distinguishing arguments made in the Amendment filed January 30, 2004; however, for the sake of brevity these arguments will not be reproduced here in their entirety but rather summarized only.

With respect to Hau et al., it has been shown that the method of Hau et al. is directed to video conversion from one format to another and is primarily concerned with not introducing aliasing artifacts in the conversion process rather than eliminating pre-existing aliasing artifacts, or corruption.

It has been also shown that to achieve this result the bandlimiting filter used in the Hau et al. method is necessarily a linear filter. Thus, Hau et al. does not teach each and every element of applicant's claimed subject matter and does not properly support the rejection under 35 U.S.C. § 102.

In addition, Hau et al. could not achieve its desired result if a non-linear median filter were to be substituted for the specified bandlimiting filter since the median filter would not attenuate the high frequencies in some cases thus leading to aliasing in the

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output signal. Conversely, if a linear bandlimiting filter were to be substituted for the necessary non-linear median filter in the method, filter and apparatus of applicant, the desired result of selectively attenuating corruption in the input signal without degrading the original signal could not be achieved.

The 35 U.S.C. § 103 rejections based on Hau et al. as the primary reference are not effective for the same reasons stated above. It would not be obvious to combine the cited references in a way that would incorporate a non-linear median filter in the method of Hau et al. since to do so would render the method unfit for its intended purpose.

The 35 U.S.C. § 103 rejection based on Rhodes in view of Hau et al. is not effective since, although Rhodes does teach the conversion of a digital signal to luminance space, this reference, as is the case with Hau et al., does not teach or suggest removing aliasing artifacts from a digital input signal.

In summary, the claims have been amended in an effort to advance prosecution in the application. Entrance of the amendment in the application is requested since it is believed to place the claims in condition for allowance or at least reduce the issues for appeal.

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The claims, as amended, are proper in form for allowance and in substance are directed to subject matter which has been shown to be wholly novel and unobvious over the references of record. Reconsideration of the application and allowance of the claims are respectfully requested.

Respectfully submitted,



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